

FIRE-RESISTANT SILICONE POLYMER COMPOSITIONS

ABSTRACT

A fire resistant composition comprising: a silicone polymer; mica in an amount of from 5% to 30% by weight based on the total weight of the composition; and a limited amount of glass additive sufficient to enable the formation of a self supporting ceramic material at temperatures above the decomposition temperature of the silicone polymer and below the fire rating temperature of the composition. The glass additive addition required to produce the self supporting ceramic material has been found to be preferably from 0.3% to 8% by weight based on the total weight of the composition. The composition is applicable to products formed for fire wall linings, fire partitions, screens, ceilings or linings, structural fire protection, fire door inserts, window or door seals, intumescent seals, in electrical switchboard cabinets or cables. In one cable application, the composition may be used as the extruded intermediate material (2) between the conductor (3) and extruded sheath (4).